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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MOORE, MARGARET G

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/643,528

Applicant(s)

BARBER, JOHN

Examiner

Margaret G. Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 72 to 96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 72 to 96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The disclosure is objected to because of the following informalities:

1. The disclosure does not contain a heading titled Brief Description of the Drawings.
2. Please update the US patent application referred to on page 8 of the specification.

Appropriate correction is required.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Initially, the Examiner would like to note that the instant claims contain specific functional language. Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. MPEP 2112 notes that "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on

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prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

5. Claims 72 to 78, 80, 82, 83, 85 and 87 to 91, 93 to 96 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ertle et al.

Ertle et al. teach processing aids for thermoplastic resin compositions. The aids are amorphous particulate silicates and are added in an amount of less than about 2%. See column 5, lines 20 to 45. In Example 1 the particles pass through a 325 mesh US standard screen, which corresponds to a particle size of less than about 45 microns (see US 5,855,314, column 6, line 14). The processing aid in Ertle et al. meets all of the requirements for the viscosity modifier in the instant claims, including particle size, amount and composition (i.e. being both amorphous and meeting claim 76). These processing aids are added to a polymeric liquid (column 4, line 21, teaches a melted resin). It appears that each component required for the claimed composition is fully met by the teachings in Ertle et al. Thus, while patentees do not specifically teach the viscosity lowering functional limitations of the composition claims 72 to 75 or of method claims 89 or 90, such a property would appear to be inherently present in the composition and method of Ertle et al.

For claims 77 and 78, note that the silicates therein are termed amorphous, indicating that they have no crystalline content. Also note that Ertle et al. is silent with respect to any cristobalite content, nor would the skilled artisan have any reason to expect that the particles therein would have such a component.

For claim 82, the Examiner has a basis in fact and/or technical reasoning to reasonably support the determination that the silicate in Ertle et al. inherently meets this claimed property. For instance, she notes that the specification indicates that magnesium silicates are operable and preferred viscosity modifiers, and since the

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magnesium silicate in the specification meets this requirement, it would follow then that the magnesium silicate in the prior art meets this requirement. In addition, the Examiner provides two prior art teachings leading one to believe that the Mohs hardness of magnesium silicate is quite lower than 6. See for instance Larson, column 2, lines 40 to 42, which indicate that hydrated magnesium silicate has a Mohs hardness of 1. See also Hiroi et al., column 5, lines 42 to 45, which teach that magnesium silicates have a Mohs hardness of less than 3. Thus it is the Examiner's position that the magnesium silicate in Ertle et al. inherently meets this limitation. With regard to claims 83 and 85, one can determine from the random process by which the particles are prepared in Ertle et al. that they will result in an inherent mixture of particles having diverse shapes and surface.

6. Claim 86 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ertle et al.

While patentees do not expressly teach using a recycled polymer, patentees are open to the type of thermoplastic polymer used therein. Thus one having ordinary skill in the art would have been motivated to use a recycled polymer in the composition of Ertle et al. in an effort to conserve resources.

7. Claims 73, 75, 76, 79, 81 to 88, 90 to 92 and 94 to 96 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over WO 00/73370, herein Booth.

Booth teaches the addition of minor amounts (.5% by weight) of a mineral composition to thermoplastic resins. See for instance page 15, which teaches a particle size range and amounts that meet the instant claims. See also page 13. This particle is 40% crystalline and 60% amorphous and is a naturally occurring aluminosilicate. Due to the breadth of the term "metal oxide" this particle meets claim 76, as well as claims 79 and 81. Applicants admit in their specification that the particles therein are useful in the claimed composition and method. (Note reference to 10/036,159 on page 8 of the specification, which is a child of 09/322,211. The latter application is the priority

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document for Booth.) As such the particles in Booth will meet the requirements of claims 82 to 85. While Booth teaches that the addition of the silicate improves the flow of the resin, Booth does not specifically teach the functional viscosity limitations found in the independent claims.

For reasons consistent with those given in paragraph 5, *supra*, the composition in Booth appears to inherently meet the functional viscosity requirements. That is, the viscosity modifier in Booth is the same as that claimed compositionally, and is added in an amount and size that meets the claimed requirements. Any viscosity properties inherently found in the claimed composition would therefor be expected to be found in the prior art composition, even if the prior art is silent to these properties.

See Booth page 11, line 15, which teaches recycled plastics meeting claim 86.

8. Claims 72, 73 and 75 to 96 are rejected under 35 U.S.C. 102(e) as being anticipated by Booth et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Booth et al. teach thermoplastic compositions containing a naturally occurring aluminosilicate glass. This glass is amorphous and does not have a regular crystalline structure. See column 5, lines 43 to 45. Applicants admit on page 8 of the specification that this filler meets the claimed viscosity modifier. As can be seen from claims 1 to 3 in Booth et al., the glass is added in an amount of less than 2% by weight and has a particle size meeting that claimed. Thus, while Booth et al. fails to mention the specific viscosity requirements of the independent composition and method claims, the skilled artisan would expect them to be inherently present in the composition of Booth et al., since the compositions claimed and that in the prior art are the same.

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With regard to claim 76, due to the breadth of the term "metal oxide" the silicate in Booth et al. meets this claim, as well as claims 79 and 81. Since patentees admit that the filler in Booth et al. is useful in the claimed composition, it would be expected to meet each of the requirements of claims 82 to 85.

Figure 5 in Booth et al. tests recycled resins, meeting claim 86.

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 72, 73 and 75 to 96 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 to 26 of U.S. Patent No. 6,921,789. Although the conflicting claims are not identical, they are not patentably distinct from each other because applicants' admit in their specification that the naturally occurring aluminosilicate particles taught and present in the claims of '789 meet the requirements of the viscosity modifier in the instant claims. Thus each property instantly claimed, albeit not specifically claimed in '789, will inherently be


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present in the claimed composition and method of '789. Note that the particle size and amounts of viscosity modifier claimed are claimed in '789.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret G. Moore whose telephone number is 571-272-1090. The examiner can normally be reached on Monday to Wednesday and Friday, 10am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Margaret G. Moore
Primary Examiner
Art Unit 1712

mgm
8/30/05